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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,530	07/19/2004	Dan Colvin	81098388 / FMC 1741 PUS	4529
28395 7590 07/18/2007 BROOKS KUSHMAN P.C./FGTL 1000 TOWN CENTER 22ND FLOOR SOUTHFIELD, MI 48075-1238			EXAMINER VANAMAN, FRANK BENNETT	
			ART UNIT 3618	PAPER NUMBER
			MAIL DATE 07/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/710,530		COLVIN ET AL.	
	Examiner		Art Unit	
	Frank Vanaman		3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) 8-13 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-26 is/are allowed.
- 6) ☒ Claim(s) 1 and 14 is/are rejected.
- 7) ☒ Claim(s) 2-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Status of Application

1. Applicant's amendment, filed January 29, 2007, and the supplemental remarks filed May 9, 2007 have been entered in the application. Claims 1-14 and 21-26 are pending, with claims 21-26 being newly added. Claims 8-13 are withdrawn from consideration.

Claim Rejections - 35 USC § 102, 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1 and 14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Boggs et al. (US 6,516,253, cited by applicant). Boggs et al. teach the determination of an engine start condition in a hybrid vehicle configuration (figure 1), including primary (20) and secondary (24) power generating systems coupled via a power transfer connection (45) and to a drive train (26, 33) to drive wheels (34), wherein the determination (figure 2, step 70) of changes in engine speed (a change in speed understood to constitute acceleration) at the engine output shaft (input to 45), greater than a predetermined amount constitute an indication that the engine is running ("yes" at step 70), and further wherein the determination that the engine is not running may be made ("no" at step 70) prior to the starting of the engine. Alternatively, the reference to Boggs et al. fail to explicitly teach that the variations of output speed of the engine shaft are timewise variation (wherein changes of speed with respect to time constitute acceleration), it would have been obvious to one of ordinary skill in the art at the time of the invention to measure the speed changes of the engine taught by Boggs et al. in a timewise manner for the purpose of determining change data within a prescribed number of loops of the operating system program.

Allowable Subject Matter

4. Claims 2-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 21-26 are allowed.

Response to Comments

6. Applicant's comments, filed with the amendment, have been carefully considered. Initially, applicant describes the operation of Boggs et al. (e.g., page 9, lines 1-7) and traverses the examiner's determination that Boggs is understood to use an acceleration value. The examiner disagrees. Boggs et al. specifically monitor variations in speed (and explicitly use such a determination of a variation in speed to determine that an engine is running). Boggs et al. additionally teach that these variations are monitored by a looping program. Whether it is specifically mentioned as acceleration or not, a time-wise sampling of speed with a program monitoring variations in speed is measuring an implicit acceleration based on the variations of speed per unit time of the loop of the sampling step of the program. Alternatively, it is not deemed to be beyond the skill of the ordinary practitioner to explicitly use an acceleration value by comparing changes in speed (the measurement of which is already anticipated by Boggs et al.) with time associated with the looping of the program (which would be understood to be inherently known in association with the loop speed set in the device which executes the program), in order to improve the accuracy of the determination, or to allow the speed deviations to be compared for diagnostic purposes with other speed deviation data taken by programs operating with different loop speeds.

Applicant refers to the requisite sampling rate needed by Boggs et al. to achieve the taught measurement, however this does not appear to be related to a distinction which is set forth in the claims. Applicant has asserted that "instantaneous acceleration may be determined, for example, by taking the derivative of a speed signal, without using the speed changes in the detection method". The examiner disagrees. As applicant is well aware, a speed signal cannot be measured by a digital computing device without having been sampled, and a derivative of a single point (i.e., taking only a single speed value) cannot result in a meaningful result without information associated with at least one further sample point and the value of time elapsed between the two sample points unless the speed value can be categorized by an equation - however such an equation could not be determined by a computing device without the taking of

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plural samples - again applicant is undoubtedly well aware that a line cannot be meaningfully defined by a single point.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry specifically concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 571-272-6701.

Any inquiries of a general nature or relating to the status of this application may be made through either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A response to this action should be mailed to:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450,

Or faxed to:

PTO Central Fax: 571-273-8300

F. VANAMAN
Primary Examiner
Art Unit 3618



7/10/07